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ABSTRACT

The degree of agreement between the Bem Sex Role Inventory (BSRI) and the Personality Attributes Questionnaire (PAQ) in assigning sex role categories was investigated by administering both instruments to undergraduate education majors. As a result of scoring, subjects were classified as androgynous, masculine, feminine, or undifferentiated. It was concluded that the BSRI and the PAQ failed to identify large percentages of subjects as belonging to the same sex role categories; therefore, doubts were raised about the concept of androgyny, as well as the extent to which the different instruments measure the same constructs. There are problems in categorizing individuals differently according to the norms used, and in determining the actual sex role identity of individuals. (MH)

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Comparison of Categorical Assignments of the BSRI and the PAQ

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Running Head: Categorical Assignments of BSRI and PAQ

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Comparison of Categorical Assignments of the BSRI and the PAQ

Within the past several years a shift in focus in sex role identity research has occurred which has placed increasing emphasis on the concept of androgyny. This emphasis has been seen with regard to both conceptual issues and to the concern for the measurement and identification of specific sex roles.

Androgyny has been conceptualized as representing an integration of masculine and feminine sex roles. Traditional measures of masculinity and femininity, which have tended to view sex role identity as being bi-polar, with masculinity and femininity representing opposite ends of a continuum, do not allow for the measurement of sex role in a manner consistent with the concept of androgyny. However, the conceptualization of masculinity and femininity as representing independent and separate roles, rather than bipolar extremes, has recently gained wider acceptance. Both Bem (1974, 1977) and Spence (1974) have developed instruments for the measurement of masculinity and femininity based on this assumption.

The Bem Sex Role Inventory (BSRI) consists of 60 items, 20 from each of three secales: Masculinity (M), Femininity (F), and Social Desirability (SD). The instructions direct subjects to indicate on a 7 point scale the extent to which each item is descriptive of them. Each of the seven points on the scale is labeled with the scale extending from 1 (never or almost never true) to 7 (always or almost always true.

The Personality Attributes Questionnaire (PAQ) consists of 24

items which include 8 items from each of three scales: Masculinity (M), Femininity (F), and Masculinity-Femininity (M-F). Subjects indicate on a 5 point likert type scale the point which best describes them on each descriptive continuum. However, only the end points of each continuum are labeled.

For both measures a subject's score on each scale is determined by adding the numbers for each item within the scale. Additionally, the way in which subjects are assigned to sex role category is identical for both instruments. An individual is categorized as androgynous if scores on both the M and F scales are above the median, as masculine if the M score is below the median, as feminine if the F score is above the median and the M score is below the median, and as undifferentiated if both the M and F scores fall below the median. Although the sex role categorization procedure (and categories) were not initially the same for the both instruments, Bem modified the categorization format for the BSRI to that used by Spence in the PAQ.

Because of the similarities between the BSRI and the PAQ, the assumption that they measure the same construct and, therefore, should categorize individuals identically in terms of sex role, is frequently made. Unfortunately, this assumption has not been investigated systematically, and the extent to which both measures identify identical subjects as androgynous, masculine, feminine, or undifferentiated has not been determined. Failure of the two instruments to arrive at such agreement would have potentially major implications for the construct validity of the instruments

and for the interpretation of data obtained using one or both of the instruments. The purpose of the present study was to assess the degree of agreement between the BSRI and the PAQ in making sex role category assignments.

Methodology

Subjects

The BSRI and the PAQ were completed by 160 undergraduate student volunteers. The order of presentation of the BSRI and the PAQ was varied randomly to prevent any position effect. All subjects were juniors or seniors in teacher education programs at the University of Houston.

Analysis

Scores for each subject on the BSRI and the PAQ were computed using the scoring formats proposed by Bem (1977) and Spence (1974). Subjects were then classified as either Androgynous, Masculine, Feminine, or Undifferentiated, using the classification formats and the median scores presented by Bem and Spence.

In addition, following the suggestion of Bem (1977), sample medians were established for both the BSRI and the PAQ. Using these sample medians subjects were then reclassified as Androgynous, Masculine, Feminine, or Undifferentiated.

For each distribution (Bem and Spence norms and sample norms), cross tabulations were computed and the percentage of categorical agreement across instruments established.

Results

The initial comparison of categorical assignment of individuals by the BSRI and the PAQ was made employing the instrument norms

provided by Bem (1977) and Spence (1974). This crosstabulation comparison is presented in Table 1. An examination of the data

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Insert Table 1 About Here

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shows several interesting aspects of the categorical assignments and their overlap. Because of the very high distribution of obtained scores on the PAQ, no individual was classified as undifferentiated; however, 16 Ss (10%) were identified as undifferentiated by the BSRI. Of these 16 subjects, 15 (94%) were classified as androgynous by the PAQ and 1 was classified as masculine. Additionally, 22 of 24 (92%) subjects identified as masculine by the BSRI and 53 of 56 (95%) of the individuals categorized as feminine by the BSRI were labeled as androgynous by the PAQ. Overall, approximately 41% of the categorical assignments (65 of 160 cases) were the same across the two instruments, with 95% of this overlap (62 of 65 cases) being accounted for by agreement on individuals identified as androgynous by both the BSRI and the PAQ.

Both the BSRI and the PAQ were then renormed following the suggestion of Bem (1977). This procedure calls for the computation of sample medians and their use in making categorical assignments following normal procedurs for the instruments. Medians for the sample were computed to be 101 on the masculine scale of the BSRI and 108 on the feminine scale of the BSRI and 29 on the masculine scale of the PAQ and 34 on the feminine scale of the PAQ. Categorical assignments were made for Ss employing these sample medians and crosstabulations run for these assignments across

instruments (see table 2).

Insert Table 2 About Here

An examination of Table 2 shows categorical distributions for both the BSRI and the PAQ which more closely approximates the distribution expected based on instrumentation research by Bem and Spence. However, only 84 individuals (approximately 52%) were categorized identically by both instruments; with 40% of this overlap (34 of 84 cases) being accounted for by agreement on individuals identified as undifferentiated by both the BSRI and the PAQ.

Discussion

Although the raw score correlations between the BSRI and the PAQ were fairly high (.5559 between masculine scales and .5897 between feminine scales), the failure of the BSRI and the PAQ to identify large percentages of individuals as belonging to the same sex role categories raises important questions concerning the concept of androgyny and the extent to which it can be assumed that studies employing different instruments are measuring the same constructs. Additionally, the differences in categorical assignment based on the use of instrument and sample medians points to a problem basic in employing both instruments: If individuals are categorized differently dependent upon the norms used, which category represents the actual sex role identity of the individual? If these instruments were to be used to examine only group differences on the masculinity and femininity scales, this problem would not be an issue, but by identifying individuals as belonging to a specific sex-role category the concern becomes

crucial. This is certainly true in attempting to gain accurate research data, and is becoming even more important as instruments such as the BSRI and the PAQ are beginning to be employed in diagnostic and/or quasi-diagnostic situations.

Why the BSRI and the PAQ do not classify a higher percentage of individuals identically cannot be determined from this study. However, with chance agreement at the 25% level, categorical agreement of 41% (instrument norms) and 52% (sample norms) does not seem adequate for instruments which purport to measure the same construct.

Table 1
Comparison of Categorical
Assignments Employing Instrument
Norms

PAQ

BSRI

Count Row Pct. Col. Pct. Total Pct.	ANDR.	MASC.	FEM.	ROW TOTAL
Andr.	62 96.9 40.8 38.8	0 0 0 0	2 3.1 66.7 1.3	64 40.0
Masc.	22 91.7 14.5 13.8	2 8.3 40.0 1.3	0 0 0 0	24 15.0
Fem.	53 94.6 34.9 33.1	2 3.6 40.0 1.3	1 1.8 33.3 0.6	56 35.0
Undif.	15 93.8 9.9 9.4	1 6.3 20.0 0.6	0 0 0 0	16 10.0
Column Total	152 95.0	5 3.1	3. 1.9	160 100.0

Table 2
Comparison of Categorical
Assignments Employing Sample Norms

	PAQ				
Count Row Pct. Col. Pct. Total Pct.	ANDR.	MASC.	FEM.	UNDIF.	ROW TOTAL
Andr.	19 57.6 48.7 11.9	4 12.1 11.8 2.5	8 24.2 25.5 5.0	2 6.1 3.8 1.3	33 20.6
Masc.	3 9.4 7.7 1.9	18 56.3 52.9 11.3	2 6.3 5.9 1.3	9 28.1 17.0 5.6	32 20.0
BSRI Fem.	8 24.2 20.5 5.0	4 12.1 11.8 2.5	13 39.4 38.2 8.1	8 24.2 15.1 5.0	33 20.6
Undif.	9 14.5 23.1 5.6	8 12.9 23.5 5.0	11 17.5 32.4 6.9	34 54.8 64.2 21.3	62 38.8
Column Total	39 24.4	34 31.3	34 21.3	53 33.1	160 100.0

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